

Attorney's Docket No. 1018961-000068

Application No. 10/809,901

Page 5

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

In the Official Action of April 24, 2006, claims 1, 8 and 9 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 12 -14 of copending Application No. 10/802,869. In view of the above amendments, Applicants submit the provisional obviousness-type double patenting rejection has been obviated.

As set forth above, independent claim 1 is directed to a guide wire comprising a distal end portion and a main body portion. The main body portion comprises a center layer formed of a first material, a surface layer formed of a second material, and an intermediate layer formed of a mixture of said first material and said second material. Further, as amended, said center layer, said intermediate layer, and said surface layer are provided in this order from a center of said main body portion toward an exterior of said main body portion. The first material is a Ni-Ti based alloy, and the second material is a metallic material higher in rigidity than said Ni-Ti based alloy. As such, the center layer is the Ni-Ti based alloy and the surface layer is the metallic material with a higher rigidity.

The primary reference upon which the Examiner relies, Cook, discloses a guide wire having an inner strand 13 of a readily weldable material such as stainless steel, an outer coaxial layer of shape memory material such as a nickel titanium alloy, and a polymer coating 21 which provides a base hydrophilic coating 22. Thus, Cook discloses an arrangement that is opposite to the claimed invention in that the center strand is the material with the higher rigidity and the nickel titanium alloy layer

Attorney's Docket No. 1018961-000068

Application No. 10/809,901

Page 6

surrounds the center strand. Accordingly, claim 1 is not anticipated by Cook.

Independent claim 8 is directed to a guide wire having an intermediate portion that comprises a center layer formed of a first material, and a surface layer formed of a mixture of said first material and a second material, with said surface layer covering said center layer. Still further, said surface layer is decreased in the content of said first material toward an outer surface of said intermediate portion and increased in the content of said second material toward the outer surface of said intermediate portion. Thus, the claimed surface layer has gradient physical properties in a radial direction.

In rejecting claim 8 over Cook, the Examiner appears to rely on the disclosure of a tapered section 15 comprising a strand of weldable material being radially surrounded by and fused with a shape memory material. Cook does not disclose or suggest that the fusion between the two layers is a mixture of the two materials or that the content of the fusion is varied so as to obtain gradient physical properties in the radial direction. Accordingly, Applicants submit that claim 8 is not anticipated by Cook.

Independent claim 9 recites a guide wire having a main body portion comprising a center layer formed of a first material, a surface layer formed of a second material, and an intermediate layer formed of a mixture of said first material and said second material, wherein said main body portion has a structure in which said center layer, said intermediate layer, and said surface layer are provided in this order from a center of said main body portion toward an exterior of said main body portion, wherein said intermediate layer is increased stepwise or gradually in the content of said first material toward said center layer, and wherein said first material

Attorney's Docket No. 1018961-000068

Application No. 10/809,901

Page 7

is a first metallic material, said second material is a second metallic material higher in rigidity than said first metallic material, and said second metallic material is stainless steel.

As explained above, Cook, discloses a guide wire having an inner strand 13 of a readily weldable material such as stainless steel, an outer coaxial layer of shape memory material such as a nickel titanium alloy, and a polymer coating 21 which provides a base hydrophilic coating 22. Thus, Cook discloses an arrangement that is opposite to the claimed invention in that the center strand is the material with the higher rigidity and the nickel titanium alloy layer surrounds the center strand. Accordingly, claim 9 is also not anticipated by Cook.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 25, 2006

By:


Wendi Leigh Weinstein
Registration No. 34,456

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620